

**ARIZONA DEPARTMENT OF  
TRANSPORTATION**

**ENGINEERING CONSULTANTS SECTION**

**STATEMENT OF QUALIFICATIONS PACKAGE**

**FOR CONTRACT NO. 09-09**

**ON-CALL STATEWIDE MATERIALS TESTING**



**SEPTEMBER 2008**

**STATEMENT OF QUALIFICATIONS PACKAGE  
FOR**

**CONTRACT NO. 09-09  
ON-CALL STATEWIDE  
MATERIALS TESTING**

**TABLE OF CONTENTS**

- I. PUBLIC ADVERTISEMENT**
- II. INFORMATION COPY TO CONSULTANTS**
- III. STATEMENT OF QUALIFICATIONS FORMAT INSTRUCTIONS**
  - \* Evaluation Criteria Definitions**
  - \* Panel Ranking Form**
- IV. CONSULTANT FIRM INFORMATION PAGE**
- V. LOBBYING CERTIFICATION**
- VI. ADOT EMPLOYEE POST EMPLOYMENT RESTRICTIONS**  
**(Information Bulletin No. 96-04)**  
**SUPPLEMENTAL SERVICES RESTRICTIONS**  
**(Information Bulletin No. 04-05)**
- VII. SCOPE OF WORK**
- VIII. ADVANCE AGREEMENT CHECKLIST**
- IX. BOILER PLATE CONTRACT**

**SECTION I**  
**PUBLIC ADVERTISEMENT**

**FOR PUBLICATION September 19, 2008 and September 26, 2008  
IN THE TRIBUNE NEWSPAPERS.  
(Mesa Tribune, Chandler Arizonan & Tempe Daily News)**

**ARIZONA DEPARTMENT OF TRANSPORTATION  
ENGINEERING CONSULTANTS SECTION**

**PUBLIC NOTICE FOR ON CALL STATEWIDE  
MATERIALS TESTING**

**ECS CONTRACT NO. 09-09  
TRACS NO. H LABS 02X**

**Statements Due: October 16, 2008**

The ARIZONA DEPARTMENT OF TRANSPORTATION is accepting Statements of Qualifications from firms to provide professional engineering services for testing asphalt binders, crumb rubber asphalt, emulsified asphalt and ac mixes.

Statements of Qualifications will be received until 4:00 p.m. Arizona Time on the above referenced date, at ADOT Engineering Consultants Section, 205 South 17th Avenue, Room 293E, Mail Drop 616E, Phoenix, Arizona 85007. No Statements will be accepted after the time specified.

For further information contact ADOT Engineering Consultant Section, (602) 712-7525 or [www.azdot.gov/Highways/ECS](http://www.azdot.gov/Highways/ECS). Statement of Qualification packages for Contract 09-09 are available for pickup at the ADOT Engineering Building, 205 South 17th Avenue, Room 293E, Phoenix, Arizona 85007.

**SECTION II**  
**INFORMATION COPY TO CONSULTANTS**

ARIZONA DEPARTMENT OF TRANSPORTATION  
ENGINEERING CONSULTANTS SECTION

INFORMATION COPY TO CONSULTANTS

REQUEST FOR STATEMENTS OF QUALIFICATION FOR  
CONSULTANTS INTERESTED IN ON CALL STATEWIDE  
MATERIALS TESTING  
IN MARICOPA COUNTY

ECS CONTRACT NO. 09-09

TRACS NO.H LABS 02X

Statements Due: October 16, 2008

Statements of Qualifications expressing interest in the project will be received until 4:00 P.M. (Arizona Time) on the date shown above, at the office of Engineering Consultants Section, 205 South 17th Avenue, Room 293E, Mail Drop 616E, Phoenix, Arizona 85007. NO Statements will be accepted after the time specified.

Statements will be accepted from any firm or corporation who is properly registered with the Arizona Board of Technical Registration and who has a principal or officer responsible for this contract that is properly registered with the Arizona Board of Technical Registration at the time the Statements of Qualifications are due.

The selected consultant will provide professional engineering services testing asphalt binders, crumb rubber asphalt, emulsified asphalt, ac mixes.

The consultant may be required to perform services including, but not limited to testing asphalt binders, crumb rubber asphalt, emulsified asphalt, ac mixes.

Effective the date of the public advertisement of this contract, no further contact is allowed with any ADOT personnel concerning this project except for questions of an administrative or contractual nature must be submitted in writing and directed to the attention of Nina Stanley at the address below. This restriction is in effect until selection has been announced.

Nina Stanley, Contract Specialist  
Engineering Consultants Section (ECS)  
205 S. 17<sup>th</sup> Avenue, Room 293E, Mail Drop 616E  
Phoenix, AZ 85007  
Phone 602-712-7851  
FAX 602-712-7424

Questions will be received until 4:00 PM on October 10, 2008. A fax is also acceptable. No further questions will be accepted after the time specified.

All consultants will be notified of the consultant's request for information and the Department's response to the question. Information will be posted on the ECS Website as well as faxed to those firms that have registered for project updates.

Any violation of the above contact restrictions may be grounds for rejection of the consultants SOQ.

The Engineering Consultants Section Statement of Qualifications format for Contract No.09-09 shall be followed when expressing interest in this project. The Statement of Qualifications package, or information regarding same, may be obtained from the address shown above, telephone (602) 712-7525. **Statements of Qualifications not following the correct format will be rejected.**

In order to qualify for selection, a firm must have on file with the Department a current "Prequalification Statement" or submit same with the Statement of Qualifications. Prequalification Statement forms may be obtained from the address shown above, telephone (602) 712-7525.

The Department may select one or more firms from among those submitting Statements of Qualification for further consideration. Previous experience in materials testing will be a factor in the selection.

The selected consultant and their subconsultants will be required to submit the Consultant Audit Questionnaire and comply with the Advance Agreement Checklist as detailed in SECTION VIII of the SOQ Package.

All material submitted in accordance with this solicitation becomes the property of the State of Arizona.

Lobbying certification/disclosure certification statement will be required in the introductory letter from those submitting Statements of Qualifications.

The right is reserved by the Department to reject any and all Statements of Qualification.

Professional Liability Insurance will be required.

The Boiler Plates for all Engineering Consultant Section Contracts are not negotiable.

Partnerships (joint-ventures) will not be considered.

Reviewing the successful Proposal(s) would be allowed but copying is not permitted.

Inclusion of work hour and/or plan sheet estimates in the SOQ will not be allowed.

### **SECTION III**

#### **STATEMENT OF QUALIFICATIONS FORMAT INSTRUCTIONS**



**ENGINEERING CONSULTANTS SECTION  
STATEMENT OF QUALIFICATIONS FORMAT INSTRUCTIONS  
CONTRACT NO. 09-09**

Provided for your use is the format for submission of a **STATEMENT OF QUALIFICATION**.

1. **( 5 ) COPIES OF THE STATEMENT OF QUALIFICATION ARE REQUIRED BY ADOT.**
2. There is a **TOTAL PAGE LIMIT of (12) pages**. The proposal may include clear report covers, covers, dividers, table of contents, tables, figures, maps, etc., but these must fit within the 12 page limit. A page shall be 8 1/2 X 11 inches, blank, or printed on one side only. Fold out pages are not allowable.

3. The SOQ proposal must follow the format outlined below:

|        | <u>FORMAT<br/>CONTENT</u>                                              | <u>MAXIMUM<br/>POINTS</u> | <u>TOTAL NUMBER<br/>OF PAGES</u> |
|--------|------------------------------------------------------------------------|---------------------------|----------------------------------|
|        | FRONT COVER (Optional, but<br>if included will count as a page)        |                           |                                  |
| PART A | INTRODUCTORY LETTER                                                    |                           |                                  |
| PART B | EVALUATION CRITERIA<br>May include information to<br>support Criteria. |                           |                                  |
|        | 1. Project Understanding<br>& Approach                                 | 40                        |                                  |
|        | 2. Project Team                                                        | 35                        |                                  |
|        | 3. Firms Capability                                                    | 20                        |                                  |
|        | 4. Location of Work                                                    | 5                         |                                  |
| PART C | CONSULTANT FIRM<br>INFORMATION PAGE                                    |                           |                                  |
|        | BACK COVER (Optional, but<br>if included will count as a page)         |                           |                                  |
|        |                                                                        | <u>TOTAL POINTS</u>       | <u>TOTAL PAGES</u>               |
|        | TOTAL POINTS                                                           | 100                       | 12                               |

4. Any amendments issued on the SOQ and included in the SOQ, as required, will **NOT** be counted as pages.
5. **Submissions failing to follow all instructions outlined above will be rejected and the Consultant notified in writing of the reason(s) for rejection.**

ENGINEERING CONSULTANTS SECTION  
Statement of Qualifications  
Format and Evaluation Criteria  
for Contract No. 09-09

The following describes more specifically, the content of each part.

PART A. INTRODUCTORY LETTER

The introductory letter should be addressed to:

Arizona Department of Transportation  
Engineering Consultant Section  
205 South 17th Avenue  
Room 293E, Mail Drop 616E  
Phoenix, Arizona 85007

The introductory letter should contain the following items:

- An expression of the firm's interest in being selected for the project.
- A statement that the firm is pre-qualified with ADOT, or that the necessary pre-qualification information is being submitted with the proposal.
- A statement confirming the commitment of the key personnel identified in the submittal to the extent necessary to meet ADOT's quality and schedule expectations.
- Provide name and Professional Engineers registration number of the principal or officer responsible for this contract that is properly registered with the Arizona Board of Technical Registration at the time the Statements of Qualifications are due.
- A summary of key points regarding the firm's qualifications.
- A statement that the Consultant certifies, by signing and submitting this proposal to the best of his or her knowledge and belief, that no Federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned for the purpose of lobbying (Refer to Section V).

PART B. EVALUATION CRITERIA

The information that should be included in the discussion of qualifications is outlined here.

1. Project Understanding and Approach

- a. Discuss generally the tasks involved in this project. Identify any special issues or problems that are likely to be encountered. Demonstrate clearly and concisely your understanding of the technical and institutional elements with which the consultant must deal.
- b. Outline your proposed approach for dealing with the tasks and issues of this project. A graphical depiction may be included with the evaluation criteria.
- c. Explain how your firm will use Partnering in this project. (Relates to Construction Administration only.)

2. Project Team

Identify your proposed project team and its collective qualifications for this particular project. In particular, discuss the following:

- a. Project Principal. Identify the person (or persons) who (1) will be responsible for ensuring that adequate personnel and other resources are made available for this project; (2) will handle contractual matters, and; (3) will be ultimately responsible for the quality and timeliness of the

consultant's performance. State that person's position and authority within the firm. Discuss previous similar projects for which this person has performed a similar function.

- b. Project Manager. State who will actively manage this project. Identify any projects that person will be involved with concurrently and time committed to each project. List recent similar projects for which this person has performed a comparable function. Discuss relevant experience, professional registrations, education and other components of qualifications applicable to this project.
- c. Project Engineer(s) and/or Other Key Personnel. Identify other members of the project team including subconsultants that provide special expertise or will perform key tasks. Describe their anticipated roles. Discuss their relevant experience, registration, education and other elements of qualification applicable to this project.

### 3. Firm Capability

- a. Discuss recent relevant experience of the firm. Projects listed should be similar in nature to the current project and to the extent possible involve team members proposed for this project.
- b. Discuss quantitatively how this project would impact the current and anticipated work load of the office which will perform this work. If "staffing up" will be necessary, discuss which areas and how that would be accomplished.
- c. Describe any special equipment, software or other resources your firm has which will enhance your ability to accomplish this project. If you propose to use CADD, describe the applicable training and experience of your staff and identify any previous projects for which you have used CADD.
- d. Describe your internal procedures for developing, monitoring and maintaining project schedules and budgets.
- e. Describe your internal quality control procedures.
- f. Describe any notable expertise, increase in capacity or other special capabilities of your subconsultants that are critical to your proposal.
- g. Describe how your quality program would enhance the development of this project.
- h. Describe your internal procedures for providing partnering education and development. (Relates to Construction Administration only.)

### 4. Location of Work.

Describe where the key elements of this work will be performed by the Prime Consultant and the Subconsultants. ECS will award points based on the following criteria:

|                                                                                                                                                        |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Less than 50% of all work done in state                                                                                                                | 0 points |
| At least 50% but less than 95% of all work done in state                                                                                               | 1 point  |
| At least 95% of all work done in state                                                                                                                 | 3 points |
| 100% of all work by the Prime and Subconsultants must be performed in State. Prime must be project convenient (within 35 miles of principal job site). | 5 points |

**ENGINEERING CONSULTANTS SECTION**  
**Proposal Evaluation Form**

Questions, which the review panel will generally be seeking to answer in their evaluation, are listed here. The maximum points available for each category are indicated, though the relative weighting of items within each category is up to the discretion of the individual reviewers.

**1. PROJECT UNDERSTANDING AND APPROACH (Maximum 40 points)**

- Does the consultant understand the nature and scope of the project and the major tasks and issues that will need to be addressed?
- Has the consultant correctly identified any special problems that are likely to be encountered?
- Does the consultant appreciate the interrelation and relative importance of the various project issues?
- Has the consultant's understanding of the project been expressed clearly and concisely?
- Has the consultant proposed logical approaches for dealing with the project tasks and issues?
- Does the schedule incorporate all the major tasks and events? Does it reflect the interrelationship of important project elements and events? Is the proposed timing realistic?
- Does the consultant understand its responsibilities for the project?

**2. PROJECT TEAM (Maximum 35 points)**

- What is the level of ability and experience of the proposed project manager? What is the person's record of accomplishing similar projects in the past in terms of (1) quality of work?  
(2) Meeting schedules, (3) responsiveness to special needs and concerns of the client? Is this individual familiar with specific ADOT standards and procedures?
- Does the person identified as ultimately responsible for the consultant's performance have the authority necessary to commit firm resources, and to act on behalf of the consultant regarding contractual matters and disputes? What is this person's experience and record of performance on past projects of similar type and magnitude? Has this individual been responsive to ADOT and/or other clients in the past?
- Do other key members of the project team (including subconsultants) provide the range and level of expertise necessary to deal with the scope of this project? Are these individuals familiar with specific ADOT standards and procedures? Have they worked together as a team before?
- Specify who will be responsible for construction cost estimating and that persons relative experience on projects similar to the one being submitted on.

**3. FIRM CAPABILITY (Maximum 20 points)**

- What level of experience relevant to this project does the consultant have? Are the firm's employees with the relevant experience participating in this project? Is the consultant familiar with ADOT standards and procedures? Has the firm shown a particular commitment to this type of work?

### 3. FIRM CAPABILITY (continued)

- Has the consultant provided quantitative data indicating that qualified personnel will be available for this project? Does the consultant realistically have the ability to add qualified staff if needed for this project or other projects that happen to come on line before this project is completed?
- Will this project benefit from the use of CADD? If so, does the consultant have the type and amount of CADD equipment appropriate for this project? Is the consultant's staff suitably trained and experienced in the use of CADD? Has the consultant successfully used CADD on past ADOT or similar projects?
- Does the firm have other special equipment or software that will be beneficial to this project? Are current staff members familiar with its use? Has it been used successfully before on ADOT or other similar projects?
- Is the consultant's approach for developing and maintaining the project budget and schedule sound? Has the consultant used these procedures successfully on ADOT or similar projects in the past? Are proposed measures to avoid or make up slippage on the schedule realistic?
- Is the consultant's quality control program suitable? Has it been used successfully by the consultant on ADOT or similar projects in the past?
- If one or more subconsultants are critical to the consultant's proposal, do these firms have the technical expertise, available personnel and record of performance appropriate for their anticipated roles?

**F.**

**STATEMENT OF QUALIFICATIONS/SELECTION  
PANEL COMMENT FORM**

FIRM NAME \_\_\_\_\_ # \_\_\_\_\_

PANEL MEMBER \_\_\_\_\_

**1. PROJECT UNDERSTANDING AND APPROACH**

What did you like about the firm's understanding and approach?

---

---

---

What did you dislike about the firm's understanding and approach?

---

---

---

What did you think about the way the firm handled special problems and/or special situations?

---

---

---

What parts of the understanding and approach did you think were well done?

---

---

---

What suggestions would you make to the firm to improve this section for the next time?

---

---

---

**SCORE (40 Maximum)**

\_\_\_\_\_

**F.**

**PANEL RANKING FORM - Page Two**

**2. PROJECT TEAM**

Team Strengths:

---

---

---

Team Weaknesses :

---

---

---

How are the team member's qualifications geared to this specific project?

---

---

---

**SCORE (35 Maximum)**

---

**3. FIRM'S CAPABILITIES**

Firm's strong areas as related to this project:

---

---

---

Firm's weak areas as related to this project:

---

---

---

F.

PANEL RANKING FORM - Page Three

3. FIRM'S CAPABILITIES, CONTINUED

How did the firm fit the subconsultant's qualifications/duties into overall picture?

---

---

---

SCORE (20 Maximum)

---

(SCORES ARE TO BE ENTERED AND TOTALED ON SCORE SHEET)

=====

OTHER:

Any comments on the format and presentation of the SOQ?

---

---

---

Any other comments or suggestions?

---

---

---



**SECTION IV**

**CONSULTANT FIRM INFORMATION PAGE**

**PART C - CONSULTANT FIRM INFORMATION PAGE**

CONTRACT NO.: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

CONSULTANT FIRM: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CITY, STATE ZIP: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

FAX NUMBER: \_\_\_\_\_

ADOT CERTIFIED DBE FIRM? \_\_\_\_\_

AFFIRMATIVE ACTION ON FILE WITH ADOT? \_\_\_\_\_

| SUBCONSULTANT(S) | TYPE OF WORK | ADOT CERTIFIED<br>DBE FIRM |
|------------------|--------------|----------------------------|
| _____            | _____        | _____                      |
| _____            | _____        | _____                      |
| _____            | _____        | _____                      |
| _____            | _____        | _____                      |
| _____            | _____        | _____                      |
| _____            | _____        | _____                      |
| _____            | _____        | _____                      |

**NOTE: The Consultant Firm Information Page must be a separate full page and is included in the total page count. This page is not evaluated by the Selection Panel, but is used by Engineering Consultants Section for administrative purposes.**

**SECTION V**  
**LOBBYING CERTIFICATION**

## Lobbying Certification

The Consultant certifies, by signing and submitting this proposal (see statement in "Introductory Letter"), to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract grant, loan, or cooperative agreement.
- (2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. Copies of Form-LLL "Disclosure Form to Report Lobbying", are available at ADOT Engineering Consultants Section, 205 S. 17<sup>th</sup> Avenue, Mail Drop 616E, Room 293E, Phoenix, AZ 85007.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, and U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The proposer also agrees, by submitting its proposal, that it shall require that the language of this certification be included in all subcontracts and lower tier subcontracts which exceed \$100,000 and that all such subcontracts and lower tier subcontractors shall certify and disclose accordingly.

The Department will keep the Consultants certification on file as part of their original proposals. The Consultant shall keep individual certifications from all subcontractors and lower tier subcontractors on file. Certifications shall be retained for 3 years following completion and acceptance of any given project.

Disclosure forms for the Prime Consultant and or their subcontractors and lower tier subcontractors shall be submitted to the Contract Manager at the date Statements of Qualifications are due, when said subcontracts exceed \$100,000. During the performance of the contract the Consultant and any affected subcontractors shall file revised disclosure forms at the end of each calendar year quarter in which events occur that materially affect the accuracy of any previously filed disclosure form. Disclosure forms will be submitted by the Contract Manager to the Federal Highway Administration for further processing.

## **SECTION VI**

**ADOT EMPLOYEE POST EMPLOYEE EMPLOYMENT RESTRICTIONS**

**SUPPLEMENTAL SERVICES RESTRICTIONS**



FIFE SYMINGTON  
Governor

LARRY S. BONINE  
Director

## ARIZONA DEPARTMENT OF TRANSPORTATION

INTERMODAL TRANSPORTATION DIVISION  
ENGINEERING CONSULTANTS SECTION  
205 South 17th Avenue - Room 293E, Mail Drop 616E  
Phoenix, Arizona 85007



THOMAS G. SCHMITT  
State Engineer

March 7, 1996

Engineering Consultants Section

### **INFORMATION BULLETIN 96-04**

TO: CONSULTANTS

FROM: ENGINEERING CONSULTANTS SECTION

SUBJECT: ADOT Employee Post Employment Restrictions

The purpose of this bulletin is to provide guidance to consultants in the employment of current or former ADOT employees to work on contracts administered by the Engineering Consultants Section. The following guidelines and policy are intended to avoid actual or perceived conflicts of interest. The reference to "current ADOT employee" applies to both full time employees and temporary employees.

1. A current ADOT employee cannot be employed by a consultant to work on active ADOT contracts.
2. A current ADOT employee cannot be included in a Statement Of Qualifications proposal for an ADOT consultant contract as an owner, an individual, or as a member of the consultants team. If an employee resigns to comply with this rule their last day of ADOT employment must be prior to the date that the proposals are due.
3. If a current or former ADOT employee is employed by a consultant which has an active ADOT contract for which the employee was a decision maker in the selection process or negotiated/approved billings or contract modifications, the employee is prohibited from working on these contracts (Policy and Implementation Memorandum 92-12).



Janet Napolitano  
Governor

Victor M. Mendez  
Director

**Arizona Department of Transportation**  
**Intermodal Transportation Division**  
206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Debra Brisk  
Deputy Director

**August 18, 2004**

**REVISED**  
**INFORMATION BULLETIN NO. 04-05**

**TO:** ADOT Project Managers/Monitors, Resident Engineers  
And Consultant Engineering Firms

**FROM:** Engineering Consultants Section

**SUBJECT:** CONFLICT OF INTEREST  
SUPPLEMENTAL SERVICES RESTRICTIONS

The purpose of this bulletin is to provide guidance to firms supplying supplemental service employees to ADOT under contracts administered by the Engineering Consultants Section (ECS).

The following restrictions are intended to avoid actual or perceived conflicts of interest. The reference to "ADOT contract employee" applies to both full time and part time contract employees.

1. A current ADOT contract employee cannot be included in a Statement of Qualifications proposal for an ADOT consultant contract as a member of the consultant's team. Exceptions would be:
  - a. if the contract employee resigns to comply with this rule their last day of ADOT contract employment must be prior to the date that the proposals are due; or
  - b. if the employee's contract is in it's third year and within 4 months of the contract completion date; or
  - c. if the Department exercises it's option not to extend the existing contract.
2. If a current or former ADOT contract employee is employed by a consultant which has an active ADOT contract for which the contract employee was a decision maker (for example: involved in the final scope preparation, involved in the selection process or negotiated/approved billings or contract modifications), the employee is prohibited from working on these contracts.

As of this date, a copy of this information bulletin will be included in each ECS Statement of Qualifications package.

If a waiver is requested from the above restrictions, a statement must be submitted to ECS describing the nature of their involvement prior to proposal submittal or work assignment. Resolution of potential conflicts of interest will be determined by ECS in conjunction with the applicable Deputy State Engineer.

**SECTION VII**  
**SCOPE OF WORK**



**ARIZONA DEPARTMENT OF TRANSPORTATION  
INTERMODAL TRANSPORTATION DIVISION**

**MATERIALS GROUP**

**SCOPE OF WORK  
FOR**

**On call Statewide Materials Testing**

**September 2008**

# **TABLE OF CONTENTS**

**100 GENERAL**

**110 LOCATION OF WORK**

**120 PURPOSE**

**200 WORK PERFORMED BY CONSULTANT**

**210 TESTING REQUIREMENTS**

**220 FINAL REPORT**

**300 PROJECT SCHEDULE**

**400 MATERIALS FURNISHED**

**500 ACCEPTABILITY OF THE WORK**

**600 CONTRACT ADMINISTRATION**

**610 ARIZONA DEPARTMENT OF TRANSPORTATION**

**620 CONSULTANTS**

## **APPENDICES**

- A. FINAL COST PROPOSAL**
- B. PAYMENT REPORT FORMAT**
- C. EVALUATION SCHEDULE**

SCOPE OF WORK  
STATEWIDE  
ENGINEERING SERVICES  
FOR ASPHALT BINDER, CRUMB RUBBER ASPHALT, EMULSIFIED ASPHALT and AC MIX  
TESTING

100 GENERAL

The engineering services requested consist of testing asphalt binder, crumb rubber asphalt, emulsified asphalt, and asphalt mix samples to determine compliance with Arizona Department of Transportation specifications.. In addition, other asphalt binder related testing might be requested. These services are required in the event the Department is back logged with excessive samples, testing equipment failure, or any reason that prevents the timely testing of asphalt binder and ac mixes that is required to keep with construction operations and/or mix design preparation. To be eligible for the requested testing, an independent materials testing laboratory must be accredited under the AASHTO Accreditation Program (AAP) for AASHTO\* and ASTM test methods and approved by ADOT's Quality Assurance Section. An independent laboratory need not be accredited for every test procedure listed below, however they must be accredited and approved for the test procedures for which they which to submit a proposal. In addition, those independent materials testing laboratory performing asphalt binder testing must actively participate in the Western Cooperative Test Group's (WCTG) sample proficiency test program during the life of the contract. Information on the Western Cooperative Test Group can be obtained at their web site: [www.wctg.org](http://www.wctg.org).

Engineering Services are being requested to perform the following test procedures:  
AASHTO Test Methods

|      |                                                                      |
|------|----------------------------------------------------------------------|
| T44  | Solubility of Bituminous Materials                                   |
| T49  | Penetration of Bituminous Materials                                  |
| T50  | Float test for Bituminous Materials                                  |
| T51  | Ductility of Bituminous Materials                                    |
| T53  | Softening Point of Bitumen (Ring and Ball Apparatus)                 |
| T55  | Water in Petroleum Products and Bituminous Materials by Distillation |
| T59  | Testing Emulsified Asphalts                                          |
| T72  | Saybolt Viscosity                                                    |
| T110 | Moisture or Volatile Distillates in Hot-Mix Asphalt                  |
| T164 | Quantitative Extraction of Asphalt Binder from Hot-Mix Asphalt       |
| T165 | Effect of Water on Cohesion of compacted Bituminous Mixtures         |
| T166 | Bulk Specific Gravity of Hot-Mix Asphalt                             |
| T167 | Compressive Strength of Hot-Mix Asphalt Mixtures                     |
| T170 | Recovery of Asphalt from Solution by Abson Method                    |
| T201 | Kinematic Viscosity of Asphalts                                      |
| T202 | Viscosity of Asphalts by Vacuum Capillary Viscometer                 |

|      |                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------|
| T209 | Theoretical Maximum Specific Gravity and Density of Hot-Mix Paving Mixtures                           |
| T228 | Specific Gravity of Semi-Solid Bituminous Materials                                                   |
| T240 | Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test)                      |
| T245 | Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus                            |
| T269 | Percent Air Voids in Compacted Dense and Open Asphalt Mixtures                                        |
| T275 | Bulk Specific Gravity of Compacted Mixtures Using Paraffin-Coated Specimens                           |
| T283 | Resistance of Compacted Hot Mix Asphalt to Moisture Induced Damage                                    |
| T287 | Asphalt Binder Content of Asphalt Mixtures by the Nuclear Method                                      |
| T301 | Elastic Recovery Test of Bituminous Materials by Means of a Ductilometer                              |
| T308 | Determining the Asphalt Binder Content of Hot-Mix Asphalt by the Ignition Method                      |
| T312 | Preparing and Determining the Density of Hot-Mix Asphalt by Means of the Superpave Gyratory Compactor |
| T313 | Determining the Flexural Creep of Asphalt Binder Using the Bending Beam Rheometer                     |
| T314 | Determining the Fracture Properties of Asphalt Binder in Direct Tension                               |
| T315 | Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer              |
| T316 | Viscosity Determination of Asphalt Binder Using Rotational Viscometer                                 |
| T319 | Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures                          |
| T329 | Moisture content of Hot-Mix Asphalt by Oven Method                                                    |
| R28  | Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)                            |
| R29  | Grading or Verifying the Performance Grade of an Asphalt Binder                                       |
| PP42 | Determination of Low-Temperature Performance Grade (PG) of Asphalt Binders                            |
| TP62 | Determining Dynamic Modulus of Hot-Mix Asphalt Concrete Mixtures                                      |
| TP70 | Multiple Stress Creep Recovery Test of Asphalt Binder Using a Dynamic Shear Rheometer.                |

## Arizona Test Methods

|       |                                                                                        |
|-------|----------------------------------------------------------------------------------------|
| AZ406 | Moisture Content of Bituminous Mixtures                                                |
| AZ410 | Compaction and Testing of Bituminous Mixtures Utilizing (Four Inch) Marshall Apparatus |
| AZ415 | Bulk Specific Gravity and Bulk Density of Compacted Bituminous Mixtures                |
| AZ416 | Preparing and Splitting Field Samples of Bituminous Mixtures for Testing               |
| AZ417 | Maximum Theoretical Specific Gravity of Field Produced Bituminous Mixtures             |
| AZ421 | Bituminous Material Contents of Asphaltic Concrete by the Nuclear Method               |
| AZ422 | Compaction and Testing of Bituminous Mixtures Utilizing (Six Inch) Marshall Apparatus  |
| AZ424 | Determination of Air Voids in Compacted Bituminous Mixtures                            |
| AZ427 | Asphalt Binder Content of Asphaltic Concrete Mixtures by the Ignition Furnace Method   |
| AZ502 | Percentage of Uncoated Particles Using Asphalt Emulsions                               |
| AZ504 | Vacuum Recovery of Asphalt Emulsion Residue                                            |
| AZ512 | Residue by Evaporation                                                                 |

AASHTO test method numbers may be changed, as provisional test methods become standard test methods.

To avoid conflicts of interest, the Consultant will advise the Department of any asphalt testing being done for the Contractor or an Asphalt Supplier on an assigned project.

110 LOCATION OF WORK

Projects will be located statewide as assigned. Samples will be available for pick-up at the Department's Materials Group located at 1221 N. 21<sup>st</sup> Ave, Phoenix, Arizona.

120 PURPOSE

The object of the asphalt binder acceptance, crumb rubber asphalt, emulsified asphalt and asphalt mix testing is to ensure that the materials used in construction and mix design comply with the specification requirements. Supplemental acceptance testing by an independent laboratory may be needed as problems arise, such as excessive backlog, equipment failure, or specialized testing that the ADOT materials laboratory is not equipped or staffed to perform.

200 WORK PERFORMED BY CONSULTANT – SPECIFIC TASKS

210 TESTING REQUIREMENTS

- A. General – Testing requirements, if any, will be provided by the Department.

All tests shall be performed within AAP standards, unless otherwise directed by the Department.

- B Additional Tests – Additional tests not itemized here may be requested. At the time of the request, the Department will identify the test procedure to be followed; the cost of testing and schedule for testing will be negotiated at that time.

220 FINAL REPORT

The Consultant shall submit the individual sample test results on forms provided by the Department to the Project Leader, or his designated representative immediately upon completion of testing. Along with the final report, the Consultant must provide all supporting laboratory test data. Electronic transmittal of the final report is acceptable, provided all supporting data is included.

The Consultant shall keep all test results in confidence with the Department. The Consultant shall not communicate with the Contractor, his representatives, or anyone affiliated with the Project on any matter associated with this testing.

300 PROJECT SCHEDULE

The Consultant must confirm his availability and pick up the samples to be tested from the Department's Materials Group located at 1221 N. 21<sup>st</sup> Avenue, Phoenix, Arizona, within 24 hours of verbal notification by the Project Leader, or his designated representative. .

The Consultant shall complete all services within five (5) working days of receipt of the sample from Department's Materials Group. For multiple samples, one (1) additional working day shall be granted for each. When multiple samples are submitted for testing, results shall be provided as they are completed, according to this schedule, and not held until all testing is complete. When tests are requested that are not in the itemized list in section 210, the time allowed for testing will be negotiated with the consultant.

400 MATERIALS FURNISHED

The Department shall provide all samples to be tested.

500 ACCEPTABILITY OF THE WORK

All tests performed under this contract must meet the testing protocol as established by AAP where all apparatus and procedures can be satisfactorily demonstrated to the AASHTO Materials Reference Laboratory (AMRL), unless otherwise specifically requested by the Department.

600 CONTRACT ADMINISTRATION

610 Arizona Department of Transportation

ADOT's Project Leader will:

- A. Conduct ongoing reviews of the Consultant's progress in performing the work and furnish technical comments in a timely manner.
- B. Review the Consultant's billings.
- C. Review and evaluate the Consultant's requests for extension of time and supplemental agreements.
- D. Provide a focal point contact for all questions, requests, and submittals.

620 CONSULTANT

A. The Consultant shall:

- a. Establish, furnish, and maintain office facilities to serve as the project office for the duration of the contract in the location specified in the Consultant's Statement of Qualifications
- b. Maintain an adequate staff of qualified support personnel to perform the work necessary to complete the project.
- c. Establish internal accounting methods and procedures for documenting and monitoring project costs.
- d. Establish and maintain contract administration procedures, which will include supplemental agreements, time extensions, and subcontracts
- e. Submit all invoices in accordance with Engineering Consultant Services guidelines.

B. Consultants responsibility:

The Consultant has total responsibility for the accuracy and completeness of the contract documents and related tests produced under this contract and shall check all such material accordingly.

## **SECTION VIII**

### **ADVANCE AGREEMENT CHECKLIST**



# ARIZONA DEPARTMENT OF TRANSPORTATION

## ENGINEERING CONSULTANTS SECTION

### ADVANCE AGREEMENT CHECK LIST (See FAR 31.109)

#### 1. Direct Labor

Direct labor will be billed at actual costs, as defined in FAR 31.001, unless a specific classification or individual's billing rate is capped. However, for partners, sole proprietors and Limited Liability Companies (LLCs) where owners may not be paid an hourly wage or salary, direct labor will be billed at rates agreed to by ADOT. (Also see **Compensation for Personal Services.**)

Only the pay rates of those employees who will likely be expected to be directly involved on the Project stated in the Contract can be used in developing cost proposal rates.

#### 2. Home Office Allocations or Similar Allocated Costs

FAR 31.109(h)(14) states, "General and administrative costs (e.g., corporate, division, or branch allocations) attributable to the general management, supervision, and conduct of the contractor's business as a whole." These costs may represent a significant portion of indirect (Overhead) costs.

All Cost Principles addressed in the Contract Cost Allowability Guidelines and Policies ("CCAGP") must be followed by a Consultant/Subconsultant's home office, division or other related entity that allocates costs to the Consultant/Subconsultant (see the CCAGP **A.5. Allocability of Costs**). These costs should be identified and agreed to in advance as to the amounts considered reasonable and allocable to ADOT contracts.

#### 3. Overhead Rates by Type of Engineering Discipline or Specialty

Firms qualified to provide more than one engineering discipline or specialty must be able to substantiate separate overhead rates for each of the following disciplines:

- Construction Administration (CEI)
- Design
- Geotech
- Supplemental Services

#### **4. Compensation for Personal Services**

See CCAGP B.31.205-6 Compensation for Personal Services.

Compensation for personal services is normally the most significant element of indirect cost. The components of compensation for personal services should be identified and the amounts to be considered reasonable and allocable to ADOT contracts agreed to in advance.

In particular, the following elements of Compensation for Personal Services, if applicable, should be agreed to in advance:

- Both the reasonableness and allocability of compensation paid to partners, sole proprietors, or owners and family members of same, along with highly compensated employees.
- Allowability of bonuses. Under above reference, see 2. *Bonuses and incentive compensation.*

#### **5. Cost of Money**

If this item is requested, it must be properly proposed as a separate line item in the Derivation of Costs Proposal, and documented in accordance with 31.205-10. Also see FAR 31.201-1.

#### **6. Bid and Proposal Costs (see FAR 31.205-18) and Selling/Marketing Costs (see FAR 31.205-38)**

Bid and proposal costs and selling/marketing costs will be looked at carefully in the preaward review. Any unreasonable and/or unallocable costs being claimed will be disallowed. Adequate documentation will be expected for such claimed costs. Unallowable portions will be expected to be properly identified.

#### **7. Other Direct Costs**

It will be expected that Other Direct Costs (any expense/cost other than Direct Labor and Subconsultants) be included in the Overhead cost pool. If a Consultant/Subconsultant proposes Other Direct Costs, it will need to obtain prior approval of its accounting methods by ADOT's Office of Audit & Analysis—External Audit Team before it can include such costs in its Derivation of Costs Proposal submitted to ADOT's Engineering Consultants Section.

## **7. Other Direct Costs, continued**

The list of incidental costs that follow should not be considered to be "all-inclusive". However, the items noted below are specific costs ADOT has identified as being onerous to deal with as Other Direct Costs. Most Consultants/Subconsultants already include such costs in Overhead cost pools.

- Audio/Video equipment and supplies, including VCRs and video cameras
- Cell phones
- Copy machines
- Densometer
- FAX
- Internet/electronic mail
- Mileage for company vehicles
- Office space considered to be "extra". (Exception is for Construction Administration field office.)
- Postage and/or Courier
- Survey supplies
- Telephone calls--both local and long distant

Additional points to consider:

- If a Consultant/Subconsultant does not have separate cost pools (for example CADD and Reproduction Costs), ADOT believes it will be very difficult to adequately substantiate such costs.
- Be aware that if the costs of specific services normally provided by a Consultant/Subconsultant are included in its Overhead Cost Pool, then any unexpected costs that may be incurred to provide those same services must be charged to an Overhead cost account. Any questions regarding this matter should be directed by ADOT's Office of Audit & Analysis—External Audit Team.

## **8. Incidental Costs Which Should Normally Be Charged Directly to the Contract**

- Lease/rental of vehicles or other specialty equipment. (This cost should be substantiated by evidence of appropriate bidding including support for the bid accepted.)
- Mobilization of equipment.
- Travel and Lodging, including per diem, following ADOT's Travel Authorization Policy.
- Special reproduction costs provided by outside vendors

**SECTION IX**  
**BOILER PLATE CONTRACT**

Contract No. 09-09  
TRACS No. H LABS 02X  
Project No.

A.G. Contract No: KR94-1408ALS

### CONSULTANT CONTRACT

This CONTRACT is made and entered into on \_\_\_\_\_ by and between the State of Arizona, Arizona Department of Transportation, Intermodal Transportation Division, acting by and through the Director, hereinafter called STATE, and

(Consultants Name and Address Inserted Here)

hereinafter called the CONSULTANT.

The Description and Location of the CONTRACT and related project(s) are as follows:

Description:

(Contract Description Inserted Here)

Location:

(Contract Location Inserted Here)

### RECITALS

1. The STATE desires that \_\_\_\_\_ be utilized for the above location. The trained personnel needed for the CONTRACT and related project(s) are not currently available within its own organization.
2. The CONSULTANT firm with its principals and employees is considered to be qualified and otherwise capable of performing the work required by this contract in the time allotted.
3. Therefore, pursuant to Arizona Revised Statutes, Section 28-1803(5) it is deemed to be in the public interest to enter into this contract.

**AGREEMENT**

Therefore, in consideration of these premises and of the mutual clauses and agreements herein contained, and the faithful performance thereof, the CONSULTANT and the STATE contract and agree:

**2.01 SCOPE OF WORK**

The CONSULTANT shall perform engineering services for the satisfactory completion of the CONTRACT and related project(s) as detailed and described in the following Scope of Work dated September, 2008 which is considered to be a part of this CONTRACT.

(Scope of Work Inserted Here)

**3.01 CONTRACT SCHEDULE AND COMPLETION DATE**

Work on the CONTRACT and related project(s) is scheduled to commence on \_\_\_\_\_. Work is to be completed within \_\_\_\_\_ calendar days from notice to proceed for an estimated completion date of \_\_\_\_\_. The STATE assumes no liability for work performed or costs incurred prior to the beginning date or subsequent to the CONTRACT completion date. The STATE retains the option of extending the CONTRACT for two additional one year periods. Extensions of time allowed for completing the CONTRACT may be granted under appropriate circumstances.

**3.02 CONSULTANT'S COMPENSATION - SPECIFIC RATES OF COMPENSATION**

1. The method of payment for this contract is Specific Rates of Compensation. Total compensation for the work performed shall not exceed the sum of \$\_\_\_\_\_ plus approved adjustments.
2. The STATE shall pay the CONSULTANT in monthly installments based upon Progress and Final Payment Reports submitted by the CONSULTANT in ADOT's format and in accordance with the specific rates price schedule in the Contract.
3.
  - a. The Specific Billing Rate includes the CONSULTANT'S direct labor, indirect costs (overhead) and fixed fee costs.
  - b. Other Direct Costs shall be separately approved by the STATE. These are direct expenses for travel, subsistence, per diem, or other mutually agreed upon expenses of a non-routine nature which can be identified directly to this CONTRACT.
4. Costs are to be identified separately for each project number. Costs for each category must not exceed the amounts budgeted for those specific categories during the contract time frame without prior written approval of the STATE.
5. The STATE shall not withhold retention on progress payments. However, if satisfactory progress has not been made, the STATE may first retain a maximum of 10% of the current and subsequent billings, or secondly, the STATE may refuse to make full progress payment(s) of such sums which are considered necessary.
6. When all work is delivered, accepted and approved as complete by the STATE, the ADOT Office of Audit and Analysis may prepare a report showing allowable costs incurred. Preparation of this report may require an audit examination of the CONSULTANT'S records. This may also include an examination of subconsultants or subcontractors records.
7. Final payment shall be made as soon as possible after 60 days from the date of acceptance of the audit findings, if applicable, by the STATE and the CONSULTANT.

#### 4.01 CONTRACT MODIFICATIONS

1. Contract modifications, defining and limiting the terms of the contract and compensation, must be approved by the STATE, and shall be submitted in the form and format provided by the STATE. The CONSULTANT will be compensated only with prior written authorization by the STATE. Any administrative/technical costs associated with the preparation of said modifications are solely the responsibility of the CONSULTANT.

- a. Supplemental Agreements

Significant changes in the scope, character, or complexity of the work may be negotiated if it is mutually agreed that such changes are desirable and necessary. Contract changes defining and limiting the work and compensation must be authorized by the STATE. Such supplemental agreement(s) shall be made in writing, and it is expressly understood and agreed that no claim for extra work performed or materials furnished shall be made by the CONSULTANT until authorization to proceed is granted, in writing, by the STATE.

- b. Changes Orders

The STATE may at any time, by written order, and without notice to sureties, if any, make (or direct) changes within the general scope of this CONTRACT in the services to be performed.

#### 4.02 DELAYS AND EXTENSIONS

The CONSULTANT agrees that no charges or claims for damages shall be made against the STATE for any delays or hindrances during the progress of this CONTRACT. Such delays or hindrances, if any, will be covered by an extension of time for such reasonable period as mutually agreed upon between the parties. It is agreed and understood, however, that permission to proceed with the CONTRACT after the established completion date, shall not be construed as a waiver by the STATE of any of its rights herein.

#### 4.03 LATE SUBMITTAL OF INVOICE

Unless waived by the STATE, in writing, all invoices for work performed under this CONTRACT shall be submitted within 60 days from date of acceptance of the completed portion of the work performed.

#### 4.04 PERFORMANCE EVALUATIONS

The CONSULTANT'S performance will be evaluated periodically in accordance with the schedule set forth in Appendix C of this CONTRACT.



**4.05 GENERAL COMPLIANCE WITH LAWS**

The CONSULTANT shall comply with all Federal and State laws, and local ordinances and regulations.

**4.06 LITIGATION**

In the event of litigation between the CONSULTANT and the STATE involving this CONTRACT, the laws and decisions of the State of Arizona shall apply and any such litigation shall be commenced and prosecuted in the appropriate court of competent jurisdiction of the Federal or State Court System within the geographical boundaries of the State of Arizona.

**4.07 DISPUTE ESCALATION (Administrative Review)**

A written dispute escalation process will be utilized to resolve questions of fact during the course of this CONTRACT. The final determination will be made by the STATE.

**4.08 ARBITRATION**

The parties agree to use arbitration, after exhausting applicable administrative reviews, to resolve disputes arising out of this agreement where the sole relief sought is monetary damages of \$100,000, or less, exclusive of interest and costs.

**4.09 TERMINATION, POSTPONEMENT OR ABANDONMENT**

1. The right is reserved by the STATE to terminate, indefinitely postpone work, or abandon the CONTRACT. The STATE may terminate this CONTRACT in any one of the following circumstances:
  - a. Failure of the CONSULTANT to perform the services as detailed herein and in any modifications to this CONTRACT.
  - b. Failure of the CONSULTANT to complete this CONTRACT within the time specified herein and in any modifications to this CONTRACT.
  - c. Failure of the CONSULTANT to comply with any of the terms of this CONTRACT.
  - d. When, for any reason, the STATE shall determine that such termination is in its best interest.
2. If the STATE contemplates termination under the provisions of paragraphs 1.a., 1.b., or 1.c. above, the CONSULTANT shall have five (5) days in which to cure such failure. In the event the CONSULTANT does not cure such failure, the STATE may terminate the CONTRACT without further consideration.

3. If, after Notice of Termination of this CONTRACT under the provisions of 1.a., 1.b. or 1.c. of this clause, it is determined that the CONSULTANT was not in violation or default, the Notice of Termination shall be deemed to have been issued under the terms of 1.d. of this clause.
4. Termination shall be effected by delivery to the CONSULTANT of a Notice of Termination specifying whether termination is for default of the CONSULTANT or for the convenience of the STATE, the extent to which performance of the CONTRACT is terminated, and the date upon which such termination becomes effective.
5. In the event of termination, the STATE shall be liable to the CONSULTANT only to the extent and as provided in SECTION 3.02 (CONSULTANTS'S COMPENSATION) of this CONTRACT.
6. In the event this CONTRACT is terminated, the STATE shall have the option of completing the CONTRACT, or entering into an agreement with another party for the completion of this CONTRACT according to the provisions and agreements herein.
7. If the STATE exercises this option, all costs and charges incurred by the STATE, together with the cost of completing the work under CONTRACT, will be deducted from any monies due or which may become due the CONSULTANT.

#### **4.10 CANCELLATION OF STATE CONTRACTS**

In accordance with Arizona Revised Statutes 38-511, the STATE may cancel any CONTRACT, without penalty or further obligation, made after the effective date of this section by the STATE or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the CONTRACT on behalf of the STATE or any of its departments or agencies is, at any time while the CONTRACT or any extension of the CONTRACT is in effect, an employee of any other party to the CONTRACT in any capacity or a CONSULTANT to any other party of the CONTRACT with respect to the subject matter of the CONTRACT. The cancellation shall be effective when written notice from the STATE is received by all other parties to the CONTRACT unless the notice specifies a later time.

#### **4.11 SUCCESSORS AND ASSIGNS**

The CONSULTANT and all successors, executors, administrators and assigns of CONSULTANT'S interest in the work or the compensation herein provided shall be bound to the STATE to the full legal extent to which the CONSULTANT is bound with respect to each of the terms and agreements of this CONTRACT.

#### **4.12 CONTINUING OBLIGATION**

The CONSULTANT agrees that if because of death or any other occurrence it becomes impossible for any principal or employee of the CONSULTANT to render the services required under this CONTRACT, neither the CONSULTANT nor the surviving principals shall

be relieved of any obligation to render complete performance. However, in such event, the STATE may terminate this CONTRACT if it considers the death or incapacity of such principal or employee to be a loss of such magnitude as to affect the CONSULTANT'S ability to satisfactorily complete the performance of this CONTRACT.

#### 4.13 INSURANCE

1. Without limiting any liabilities or any other obligations of the CONSULTANT, the CONSULTANT shall provide and maintain the minimum insurance coverage listed below.

Coverage will be provided with forms and insurers acceptable to ADOT and maintained at a minimum until obligations under this CONTRACT are satisfied.

- a. If applicable, Workmen's Compensation insurance to cover obligations imposed by Federal and State statutes having jurisdiction of its employees engaged in the performance of the services, and Employers' Liability insurance with a minimum limit of one hundred thousand dollars (\$100,000). Evidence of qualified self-insured status shall suffice for this section.
- b. Architects' and Engineer's Professional Liability insurance in the amount of one million dollars (\$1,000,000) each claim, with said coverage to remain in force and effect for a minimum of one year past ADOT's acceptance of the CONTRACT.
- c. Comprehensive General Liability insurance with a minimum combined single limit of one million dollars (\$1,000,000) each occurrence. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, contractors protective, products and completed operations. Said policy shall contain a severability of interest clause.
- d. Commercial Automobile Liability coverage with a combined single limit for bodily injury and property damage of not less than one million dollars (\$1,000,000) for all owned, leased, hired and non-owned vehicles. The State of Arizona and the Arizona Department of Transportation must be named as Additional Insureds and Certificate Holder on the policy.
- e. Valuable Papers insurance in an amount sufficient to assure the restoration of any documents, memoranda, reports, or other similar data relating to the work of the CONSULTANT used in the completion of this CONTRACT.
- f. The policy required by Sections c. and e. above shall be endorsed to include the STATE and ADOT, its agents and officials and employees as additional insureds and shall stipulate that the insurance afforded CONSULTANT shall be primary insurance and that any insurance carried by ADOT, its agents, officials or employees shall be excess and not contributory insurance to that provided by CONSULTANT.

- g. A certificate of insurance acceptable to ADOT shall be issued to ADOT prior to commencement of the CONTRACT as evidence that policies providing the required coverages, conditions and limits are in full force and effect. Such certificate shall contain provisions that coverage afforded under the policies will not be cancelled, terminated or materially altered until at least 30 days prior written notice has been given to ADOT.

#### **4.14 INDEMNIFICATION - RESPONSIBILITY FOR CLAIMS AND LIABILITIES**

**1. For Professional Liability**

To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the State of Arizona, its agents, representatives and employees from and against liability for loss or damage resulting from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant, but only to the extent the loss or damage results from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant.

**2. For Other than Professional Liability**

To the fullest extent permitted by law, the CONSULTANT shall indemnify and hold harmless the State of Arizona, its agents, representatives and employees from and against liability for loss or damage resulting from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant, but only to the extent the loss or damage results from the negligence of the CONSULTANT, or any subconsultant, or anyone directly or indirectly employed by the CONSULTANT or any subconsultant.

#### **4.15 ANTITRUST VIOLATIONS**

The CONSULTANT and the STATE recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact borne by Purchaser or ultimate user: in this case, the STATE. Therefore, CONSULTANT, acting as a Vendor, hereby assigns to the STATE any and all claims for such overcharges.

#### **4.16 LIQUIDATED DAMAGES**

(This is an optional provision applied, on an exception basis, primarily to contracts initiated and administered by the Arizona Transportation Research Center - Not applicable to this contract)

**4.17 CONSULTANT'S RESPONSIBILITY**

The CONSULTANT has total responsibility for the accuracy and correctness of plans and related data prepared under the terms of this CONTRACT, and shall check all such material accordingly for completeness, missing items, correct multipliers and consistency. The plans will be reviewed by ADOT for conformity with ADOT procedures and contract terms. Review by ADOT does not include detailed review or checking of design of major components and related details or the accuracy with which such designs are depicted on the plans.

**4.18 ACCURACY OF WORK**

Acceptance of the work by the STATE will not relieve the CONSULTANT of the responsibility for subsequent correction of any such errors and the clarification of any ambiguities. The CONSULTANT shall make all necessary revisions or corrections resulting from errors and omissions on the part of the CONSULTANT without additional compensation.

**4.19 CONSULTANT'S ENDORSEMENT OF PLANS, ETC.**

The CONSULTANT'S seal shall be endorsed and affixed to plans, reports and engineering data furnished under this CONTRACT.

**4.20 PROFESSIONAL CONDUCT**

The CONSULTANT shall comply with the provisions of A.C.R.R.4-30-301 (which is the official compilation of the Administrative Rules and Regulations for the State of Arizona), entitled Rules of Professional Conduct, Rules of the State Board of Technical Registration for Architects, Assayers, Engineers, Geologists, Landscape Architects and Land Surveyors, which are incorporated herein by reference and hereby made a part of the CONTRACT.

**4.21 IMPROPER EXERCISE OF AUTHORITY**

It is further understood and agreed that the CONSULTANT shall not in any way exercise any portion of the authority or powers of the State of Arizona, and shall not make a contract or commitment, or in any way represent itself as an agent of the State of Arizona beyond the scope of this CONTRACT unless expressly authorized, in writing, by the STATE.

**4.22 CONFLICTS OF INTEREST**

1. The CONSULTANT shall not engage the services on this CONTRACT of any present or former STATE employee who was involved as a decision maker in the selection or approval processes or who negotiated and/or approved billings or contract modifications for this CONTRACT.
2. The CONSULTANT agrees that no public or private interest exists and none shall be acquired directly or indirectly which would conflict in any manner with the performance of the CONTRACT.

#### **4.23 ORGANIZATIONAL CONFLICTS OF INTEREST**

1. No contract for the construction of a project shall be awarded to the firm that designed the project, or its subsidiaries, affiliates, the parent company or subconsultants, except with the written approval of the STATE.
2. The applicability of the above also applies to a Management and/or General Consultant or any of its subsidiaries, affiliates, the parent company or subconsultants that were involved in any aspect of the design process.

##### **4.23.1 CONSULTANT - CONTRACTOR CONFLICTS OF INTEREST**

The CONSULTANT agrees that it shall not perform services on this project for the contractor, sub-contractor or any supplier.

The CONSULTANT shall not negotiate, contract, or make any agreement with the contractor, subcontractor or any supplier with regard to any of the work under this project, or any services, equipment or facilities to be used on this project.

#### **4.24 ORGANIZATION EMPLOYMENT DISCLAIMER**

1. The CONTRACT is not intended to constitute, create, give to, or otherwise recognize a joint venture agreement or relationship, partnership, or formal business organization of any kind, and the rights and obligations of the parties shall be only those expressly set forth in the CONTRACT.
2. The parties agree that no persons supplied by the CONSULTANT in the performance of CONSULTANT's obligations under the CONTRACT are considered to be STATE employees, and that no rights of State civil service, retirement or personnel rules accrue to such persons. The CONSULTANT shall have total responsibility for all salaries, wages, bonuses, retirement, withholdings, workmen's compensation, occupational disease compensation, unemployment compensation, other employee benefits and all taxes and premiums appurtenant thereto concerning such persons, and shall save and hold the STATE harmless with respect thereto.

#### **4.25 NONPROCUREMENT DEBARMENT AND SUSPENSION**

1. In accordance with 49 CFR 29.505, and by signature on this CONTRACT, the CONSULTANT certifies its' compliance, and the compliance of any subconsultants or subcontractors present or future, by stating that any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position of authority involving Federal Funds:
  - a) is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal Agency;
  - b) does not have a proposed debarment pending;

- c) has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal Agency within the past 3 years; and
- d) has not been indicted, convicted, or had a civil judgment rendered against the firm by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years as specified by 49 CFR paragraph 29.305(a).

Where the CONSULTANT or subconsultant is unable to certify to the statement in 4.26.1(a) above, the CONSULTANT or subconsultant will be declared ineligible to enter into CONTRACT or participate in the project.

Where the CONSULTANT is unable to certify to any of the statements as listed in 4.26.1 (b), (c) or (d), the CONSULTANT shall submit a written explanation to the STATE. The certification or explanation will be considered in connection with the STATE's determination whether to enter into CONTRACT.

2. The CONSULTANT shall provide immediate written notice to the Department if at any time the CONSULTANT or any subconsultants or subcontractors, present or future, learn that its Debarment and Suspension certification has become erroneous by reason of changed circumstances.

#### **4.26 COVENANT AGAINST CONTINGENT FEES**

The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this CONTRACT, and that he has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this CONTRACT. For breach or violation of this warranty, the STATE shall have the right to annul this CONTRACT without liability, or in its discretion, to deduct from the contract price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

#### **4.27 SUBLETTING, ASSIGNMENTS AND TRANSFERS**

The CONSULTANT firm was chosen to perform the work on this CONTRACT based upon training and qualifications of its members. Therefore, subletting, assignment or transfer of any work to subconsultants and lower tier subconsultants, unless approved in writing by the STATE prior to performance of work, is expressly prohibited.

**4.28 SUBCONSULTANTS (Specific Rates of Compensation)**

1. The CONSULTANT may retain Subconsultants on an "as required" basis, provided that the Subconsultants selected, and the rates to be paid, are identified on each Subconsultant's DERIVATION OF COST PROPOSAL located in the SCOPE OF WORK section, Appendix \_\_\_\_\_ of the CONTRACT, or are approved by contract modification, or by Administrative Determination Letter, as applicable. The specific rates for each Subconsultant, when applicable, will be the rate stipulated in each Subconsultant's final DERIVATION OF COST PROPOSAL, as concurred with by the STATE.

The specific rates for all Subconsultants are developed from the Subconsultant's Direct Labor, Indirect Costs (Overhead) and the Fee. The Indirect Costs (Overhead) of the Subconsultants are subject to audit unless waived by the STATE. All provisions of paragraph 3 apply to the Subconsultants. The cost to the STATE for Subconsultants shall be in amounts equal to the actual allowable costs paid to the Subconsultants.

2. The volume of work performed by the Subconsultants shall not exceed 49% of the total contract value unless waived by the STATE.

**4.29 SUBCONTRACTS**

The CONSULTANT agrees to insert in all subcontracts the clauses hereof entitled "Civil Rights," "Affirmative Action," "Ownership of Documents," "Patents and Copyrights", "Anti Lobbying and Disclosure," "Retention of Records," and "Immigration". The CONSULTANT further agrees to insert in any subcontract exceeding \$100,000 the clause hereof entitled "Environmental Protection."

**4.30 KEY PERSONNEL**

Any substitution or transfer of personnel specifically identified in CONSULTANT'S proposal as assigned to the work of this CONTRACT shall be subject to prior written approval by the STATE.

**4.31 EMPLOYMENT OF PERSONNEL OF PUBLIC AGENCIES**

The CONSULTANT shall not engage the service of any person or persons then in the employ of the STATE for work covered by the terms of this CONTRACT without the prior written approval of the STATE.



#### 4.32 ANTI-LOBBYING

1. The CONSULTANT agrees to comply with the provisions of Section 1352 of Title 31, U.S.Code (Public Law 101.121) as codified in Title 48, Federal Acquisition Regulations Subpart 3.8 and Subpart 52.203-11. The legislation prohibits federal funds from being expended by a recipient or any lower tier subrecipients of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence a Federal agency or Congress in connection with the award of any Federal contract, cooperative agreement, including the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement. All disclosure statements are to be furnished to the STATE.
2. The CONSULTANT agrees to require all subconsultants and lower tier subconsultants who have agreements exceeding \$100,000 to complete the Certification of Federal Contracts (ECS Form 90-1) and, when appropriate, the Disclosure of Lobbying Activities (ECS Form 90-3) prior to execution of the Prime Consultants Agreement with the STATE. Lower tier certifications are to be maintained by the CONSULTANT.

#### 4.33 OWNERSHIP OF DATA

1. The CONSULTANT agrees to maintain (in sufficient detail as will properly reflect all work done and results achieved in the performance of this CONTRACT) tracings, plans, specifications and maps, basic survey notes and sketches, books, records, reports, research notes, charts, graphs, comments, computations, analyses, recordings, photographs, computer programs and documentation thereof, and other graphic or written data generated in connection with the work called for in the CONTRACT; all such information and documentation to be termed "Data" under this CONTRACT.
2. All Data procured hereunder for the work funded by ADOT shall become the property of ADOT and delivered to ADOT upon request, and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE; provided however, that CONSULTANT shall not be required to retain any Data not requested by ADOT within five years from the date of final payment to the CONSULTANT hereunder; and provided further that until such delivery to ADOT the CONSULTANT agrees to permit representatives of ADOT and the Federal Highway Administration to examine and review at reasonable times all Data still in the possession of the CONSULTANT.
3. All services, information, computer program elements, reports and other deliverables which may be patented or copyrighted and created under this CONTRACT are the property of the State of Arizona and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE.

#### **4.34 ADOT PRODUCTS**

ADOT will provide the consultant with the ADOT developed software for the sole purpose of completing this contract, as set forth in the Site License Contract (which includes a detailed list of Software that will be provided to the consultant). The software is provided to the consultant solely for the purpose of completing this contract and for no other purposes. ADOT developed software including: manuals, electronic information, programs, and associated materials, remains the property of ADOT. Any use of this software for purposes other than the fulfillment of this contract is strictly prohibited. The consultant shall not copy the software or provide, distribute or demonstrate the software to other entities. Upon completion of the contract or when otherwise notified by ADOT, the contractor will return all software, backup copies, manuals, electronic information and associated materials to ADOT.

#### **4.35 RETENTION OF RECORDS**

1. The CONSULTANT and any subconsultant/subcontractor/vendor shall keep and maintain all books, papers, records, accounting records, files, accounts, reports, costs proposals with backup data and all other material relating to the CONTRACT and related project(s), and shall make all such material available at any reasonable time during the term of work on the CONTRACT and related project(s) and for five (5) years from the date of final payment to the CONSULTANT for auditing, inspection and copying upon the STATE'S request, or at the request of the Federal Highway Administration or any other authorized representative of the Federal Government.
2. The CONSULTANT shall insert in each of its subcontracts the above requirement and also a clause requiring its subconsultants to include the above requirement in any lower-tier subcontracts or purchase orders.

#### **4.36 REVIEW AND INSPECTION**

Representatives of the STATE and the Federal Highway Administration are authorized to review and inspect the CONTRACT activities and facilities during normal business hours.

#### **4.37 PROPERTY OR EQUIPMENT**

Except as otherwise provided in this CONTRACT, the lease, rental or purchase of property or equipment to perform the work herein described must have the prior written approval of the STATE. The control, utilization and disposition of property or equipment acquired using FEDERAL/STATE funds shall be determined by the STATE in accordance with the property management standards set forth in 49 CFR Part 18 , ADOT Manual - FIN 11.02, and Highways Division Policy and Implementation Memorandum No. 89-04.

#### 4.38 CIVIL RIGHTS

1. The CONSULTANT is required to comply with Executive Order 75-5, "Non-discrimination in Employment by Government Contractors and Subcontractors," which is hereby included in its entirety by reference and considered a part of this CONTRACT.
2. The CONSULTANT is required to comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, Title 49, Code of Federal Regulations, Part 21 through Appendix H and Title 23, CFR 710.405 (b) are made applicable by reference and are hereinafter considered a part of this CONTRACT.
3. The CONSULTANT is required to comply with the provisions of Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor Regulations (41-CFR Part 60). Said provisions are made applicable by reference and are hereinafter considered a part of this CONTRACT.
4. The CONSULTANT shall post in conspicuous places available to employees and applicants for employment, the following notice:

It is the policy of this company not to discriminate against any employee, or applicant for employment, because of race, color, religion, creed, national origin, sex, age, handicapped, or disabled veterans and Vietnam era veterans. Such actions shall include, but are not limited to: employment, upgrading, demotion, transfer, recruitment, or recruitment advertising; laying-off or termination; rates of pay or other compensation; and selection for training, and on-the-job training. Also, it is the policy to insure and maintain a working environment free of harassment, intimidation and coercion.

#### 4.39 AFFIRMATIVE ACTION

CONSULTANT shall take the following affirmative action steps with respect to securing supplies, equipment or services under the terms of this CONTRACT:

1. Include qualified firms owned by socially and economically disadvantaged individuals on solicitation lists.
2. Assure that firms owned by socially and economically disadvantaged individuals are solicited whenever they are potential sources.
3. When economically feasible, dividing total requirements into smaller tasks or quantities so as to permit maximum participation by firms owned by socially and economically disadvantaged individuals.
4. Where the requirement permits, establishing delivery schedules which will encourage participation by firms owned by socially and economically disadvantaged individuals.

5. Use the services and assistance of the Small Business Administration, the Office of Minority Business Enterprise of the Department of Commerce and the Community Services Administration as required.

#### 4.40 PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES

The CONSULTANT is required to adhere to the commitment made to participation by ADOT certified Disadvantaged Business Enterprises (DBE) as indicated in the firms Technical Proposal or subsequently agreed to by the STATE during negotiations. The STATE, at its discretion on a case by case basis, may waive the above limitations.

#### 4.41 ENVIRONMENTAL PROTECTION

(This clause is applicable if this contract exceeds \$100,000.00. It applies to Federal Aid Contracts Only.)

CONSULTANT is required to comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15) which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. Violations shall be reported to the Federal Highway Administration and to the U.S.E.P.A. Assistant Administrator for Enforcement. (EN-329).

#### 4.42 ENERGY CONSERVATION

(This clause is applicable to Federal Aid Contracts Only.)

CONSULTANT is required to comply with mandatory standards and policies, as applicable, relating to energy efficiency which are contained in the State Energy Conservation Plan issued by the State of Arizona in compliance with the Energy Policy Conservation Act (P.L. 94-163).

#### 4.43 PUBLICATION PROVISIONS

The CONSULTANT shall provide annual, quarterly or monthly written progress reports requested by the STATE. Prior to completion of the CONTRACT and related project(s), the CONSULTANT shall prepare a final report summarizing activities, conclusions, and recommendations in a form as prescribed by the STATE, and this report shall be a prerequisite for final payment. Publication rights to all reports are reserved by the STATE. The CONSULTANT shall not release information developed under the CONTRACT prior to publication, except upon written approval of the STATE.

**4.44 PUBLICATION PROVISIONS (RESEARCH AND UNIVERSITIES)**

(Not applicable to this contract)

**4.45 PATENTS AND COPYRIGHTS**

All services, information, computer program elements, reports and other deliverables which may be patented or copyrighted and created under this CONTRACT are the property of the State of Arizona and shall not be used or released by the CONSULTANT or any other person except with the prior written approval of the STATE.

**4.46 PATENTS AND COPYRIGHTS (RESEARCH AND UNIVERSITIES)**

(Not applicable to this contract)

**4.48 FEDERAL IMMIGRATION AND NATIONALITY ACT:**

1. General: The consultant, including all subconsultant, shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain the right to perform random audits of consultant and subconsultant records or to inspect papers of any employee thereof to ensure compliance.

2. Compliance Requirements: By submission of a proposal, the consultant warrants that the consultant and all proposed subconsultants are and shall remain in compliance with all federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract. The State may, at its sole discretion, require evidence of compliance from the consultant shall have ten working days from the receipt of the request to supply adequate information.

The Department will accept, as evidence of compliance, a showing by the consultant or subconsultant that it has followed the employment verification provisions of the Federal Immigration and Nationality Act as set forth in Sections 274A and 274B of that Act, including implementation of regulations and agreements between the Department of Homeland Security and the Social Security Administration's verification service.

The Consultant shall include the provisions of Subsection 4.30 in all its subcontracts.

3. Sanctions for Non-Compliance: Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. The Department will reduce the consultant's compensation by \$10,000 for the initial instance of non-compliance by the consultant or subconsultant. Should the same consultant or subconsultant commit subsequent violations within a two-year time period from the initial violation, the consultant's compensation will be reduced by \$50,000 for each violation. The third instance by the same consultant or subconsultant within a two-year period may result, in addition to the \$50,000 reduction in compensation, in removal of the offending consultant or subconsultant, suspension of work in whole or in part or, in the case of a third violation by the consultant, termination of the contract for default. In addition, the Department may

debar a consultant or subconsultant who has committed three violations within a two-year period for up to one year. For purposes of this paragraph, a violation by a subconsultant does not count as a violation by the consultant.

Any delay resulting from a sanction under this subsection is a non-excusable delay. The consultant is not entitled to any compensation or extension of time for any delays or additional costs resulting from a sanction under this subsection.

An example of the sanctions under this subsection is presented in the following table:

| Offense by:                                                                                       |                 |                 | Reduction in Compensation |
|---------------------------------------------------------------------------------------------------|-----------------|-----------------|---------------------------|
| Consultant                                                                                        | Subconsultant A | Subconsultant B |                           |
| First                                                                                             |                 |                 | \$10,000                  |
|                                                                                                   | First           |                 | \$10,000                  |
|                                                                                                   | Second          |                 | \$50,000                  |
|                                                                                                   |                 | First           | \$10,000                  |
|                                                                                                   | Third           |                 | \$50,000 *                |
| * May, in addition, result in removal of the subconsultant and/or debarment of the subconsultant. |                 |                 |                           |

In Witness whereof the parties hereto have executed this agreement as of the day and year first herein written.

FOR THE STATE

ARIZONA DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

By: \_\_\_\_\_

\_\_\_\_\_  
Title

FOR THE CONSULTANT

FIRM NAME

\_\_\_\_\_  
Date

By: \_\_\_\_\_

\_\_\_\_\_  
Title